

UNCLASSIFIED
EXHIBIT R-2, FY 2001 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER

(U) COST: (Dollars in Thousands)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To	Total
<u>Project Number & Title</u>	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	<u>Program</u>
A0545 Tomahawk	\$147,314*	\$139,522	\$89,565	\$52,483	\$34,891	\$13,785	\$14,003	Continuing	Continuing
A1784 Theater Mission Planning Center	\$2,479	\$1,895	\$1,871	\$22	\$28	\$28	\$28	0	\$96,745
TOTAL	\$149,793	\$141,417	\$91,436	\$52,505	\$34,919	\$13,813	\$14,031	Continuing	Continuing

Quantity of RDT&E Articles

12 EDM

*FY99 budget reflects a \$98,573K Congressional add for the Tactical Tomahawk Program (A2658), which has been revised by \$227K for Congressional undistributed adjustments; by \$2,427K for a Small Business Innovative Research (SBIR) assessment; and by \$446K for Inflation savings. The FY99 budget also reflects a \$1,000K Congressional Add for Alternate Turbine Engine (A2659), which has been revised by \$2K for Congressional undistributed adjustments; and by \$24K for a Small Business Innovative Research (SBIR) assessment and by \$5K Inflation savings.

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) The Tomahawk Weapons System (TWS) provides the Tomahawk cruise missile attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)). The TLAM can be fitted with either Conventional unitary warhead (TLAM/C), Nuclear warhead (TLAM/N) or submunition Dispenser (TLAM/D). This program ensures that the TWS exploits state-of-the-art technology to preserve the efficiency of this proven weapon system.

(U) The Tomahawk project includes all missile development; mission planning system development, and submarine and surface ship weapons control development.

(U) The Tomahawk TLAM Block III system upgrade (IOC March 93) incorporated the Global Positioning System (GPS) capability; provided a smaller, lighter warhead with variable fuze, extended range, Time of Arrival, and improved accuracy for low contrast matching of Digital Scene Matching Area Correlator. The Tactical Tomahawk (TT) Weapons program, beginning in FY 1998, will provide the tactical commander a quick reaction response capability as well as improved flexibility, accuracy, and lethality.

(U)The Theater Mission Planning Center (TMPC) project provides for the TMPC and the Afloat Planning System (APS), a shipboard version of TMPC. TMPC and APS provide mission planning and employment support information for both the nuclear (TMPC only) and conventional TLAM. The TMPC/APS software development decreases mission planning time and increases the quality and accuracy of each mission. TMPC provides mission planning at the theater level and is designed for high rate production responsive to national/strategic requirements. APS provides mission planning at the Battle Group level that is responsive to the needs of the tactical situation. Tomahawk Strike Planning Tools are comprised of two elements. The Mission Distribution System (MDS) is a subset of TMPC, and APS also deployed as the stand-alone TLAM employment system, that support the effective employment of TLAM by the Force Level Tomahawk Strike Coordinator (TSC). The Electronic Tomahawk Employment Planning Package (ETEPP) provides the Tomahawk user with command and control information needed to employ Tomahawk missions.

(U) The Tomahawk Weapons Control System provides launch capability for surface and submarine platforms. Surface Advanced Tomahawk Weapons Control System (ATWCS) Track Control Group Replacement completed Initial Operational Capability (IOC) in FY98. Launch Control Group Replacement will IOC in FY00. Submarine ATWCS Block 1/C Mod 0/1 and Mod 2 will complete and deliver in FY00. Tactical Tomahawk Weapons Control Systems enters Engineering and Manufacturing Development in FY99 with IOC planned for FY03.

(U) These efforts provide battle-group tactical flexibility and responsiveness while maximizing TWS wartime capability.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

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EXHIBIT R-2a, FY 2001 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A0545

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
PLANNING CENTER

PROJECT TITLE: TOMAHAWK

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
A0545 Tomahawk	\$147,314	\$139,522	\$89,565	\$52,483	\$34,891	\$13,785	\$14,003	Continuing	Continuing
TOTAL	\$147,314	\$139,522	\$89,565	\$52,483	\$34,891	\$13,785	\$14,003	Continuing	Continuing

Quantity of RDT&E Articles

12 EDM

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) The TOMAHAWK Cruise Missile has been designed to accurately attack land targets from seaborne platforms at great distances from the launch platform (Tomahawk Land-Attack Missile (TLAM)). The TLAM can be produced with either a single conventional warhead (TLAM/C), a submunition dispenser (TLAM/D), or a nuclear warhead (TLAM/N).

(U) The Tomahawk development program (Project A0545), beginning with FY 1998, contains all costs for the Tactical Tomahawk (TT) program including the missile, weapons control systems, both surface ship and submarine, and the Tomahawk command and control systems (TC2S).

(U) The last fielded upgrade to the Tomahawk system was designated Block III. This effort added a GPS capability, a smaller, lighter warhead, a time of arrival calculation, added range, and an updated Digital Scene Matching Area Correlator for low contrast matching. The missile development covered by this budget, Tactical Tomahawk provides a comprehensive baseline upgrade to the Tomahawk Weapon System including the missile, weapons control systems, and mission planning systems. The upgrade will improve system flexibility, responsiveness, accuracy and lethality. The essential elements of the TT are upgrades to the guidance, navigation, control, and mission computer systems of the missile along with the associated Command and Control (C2) systems and weapons control systems. TT will provide a UHF Satcom data link to enable the missile to receive in-flight mission modification messages, to transfer health and status messages, and to broadcast Battle Damage Indication (BDI) messages. TT also includes the development of a high anti-jam GPS receiver and antenna system for the missile.

(U) The weapons control development portion of the project is centered on the Tactical Tomahawk Weapons Control System (TTWCS), being introduced into the surface and submarine fleets. The TTWCS advancements are increase data throughput thereby reducing the time needed to execute missile preparation and launch sequences, and improving strike coordination capabilities.

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PROJECT NUMBER: A0545

**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
PLANNING CENTER**

PROJECT TITLE: TOMAHAWK

((U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1999 ACCOMPLISHMENTS:

- (U) [\$4,200] Continued development and delivery of software for SSN 688 MK2 Block 1C Mod 0/1 and Mod 2.
- (U) [\$143,114] Continued TT Engineering and Manufacturing Development including mission planning and weapons control development.

2. FY 2000 PLAN:

- (U) [101,419] Continue development of Tactical Tomahawk missile leading to System CDR. Continue missile prototype fabrication and ground testing to begin Development Testing (DT-1, 2) in 2001.
- (U) [\$38,103] Continue development of common launch and track control systems for surface ship and submarine platforms for the new Tactical Tomahawk baseline. Critical Design Review leading to Development Testing of entire system in 2001.

3. FY 2001 PLAN:

- (U) [17,296] Conduct Land Based System Integration Tests of redesigned surface and submarine weapons control systems to the Tactical Tomahawk Baseline. Commit to System Operational Assessment.
- (U) [\$17,678] Complete and install advanced design of Tomahawk command, control, and mission planning system for full system Operational Assessment.
- (U) [\$54,591] Conduct Development Testing of missile ending with Operational Assessment (OA).

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PROJECT NUMBER: A0545

**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
PLANNING CENTER**

PROJECT TITLE: TOMAHAWK

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY2001</u>
(U) FY 2000 President's Budget:	\$163,123	\$145,317	\$107,895
(U) Appropriated Value:	\$163,732	\$140,317	
(U) Adjustments from President's Budget:	-\$15,809	-\$5,795	-\$18,330
(U) FY2001 President's Budget Submit:	\$147,314	\$139,522	\$89,565

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 1999 net decrease of \$15,809 thousand reflects a \$3,515 thousand decrease for Small Business Innovative Research assessment, a \$13 thousand decrease for Federal Technology Transfer and a \$12,281 thousand decrease for the Navy's reprioritization of requirements. The FY 2000 net decrease of \$5,795 thousand reflects a \$5,000 thousand decrease for a Congressional reduction and a \$795 thousand decrease for an Across-the-Board Congressional rescission. The FY 2001 net decrease reflects a \$1,032 thousand decrease for Strategic Sourcing Plan savings and Navy Working Capital Fund adjustments, a \$18,000 thousand decrease associated with reduced developmental test and evaluation efforts, a \$581 thousand decrease for revised economic assumptions, and a \$254 thousand decrease for reprioritization of requirements within the Navy; offset by a \$1,400 thousand increase for Theater Mission Planning Center and imagery upgrades, a \$137 thousand increase for Military and Civilian Pay.

(U) Schedule: Technical progress to date of the Tactical Tomahawk AUR dictated a shift of CDR from 1st quarter FY00 to 2nd quarter FY00. TTWCS PDR changed from 4th quarter FY99 to 2nd quarter FY00 after the contract was awarded to the winning competitor in May. The original Weapons Control System schedule was based on a generic model without the benefit of a signed contract. After reviewing the contractors proposed approach, the Program Office decided to hold the PDR in 2nd quarter FY00.

(U) Technical: Not applicable.

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PROJECT NUMBER: A0545

**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
PLANNING CENTER**

PROJECT TITLE: TOMAHAWK

(U) C. OTHER PROGRAM FUNDING SUMMARY (Dollars in Thousands)

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To	Total
<u>Appn</u>	<u>Budget</u>	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	<u>Program</u>
WPN	\$23,586	\$433,742	\$0	\$0	\$57,598	\$85,513	\$271,305	\$245,534	Continuing	Continuing
OPN	\$32,185	\$43,641	\$49,625	\$47,492	\$43,803	\$35,083	\$35,258	\$36,652	Continuing	Continuing

Related RDT&E

Not applicable.

(U) D. ACQUISITION STRATEGY:

In 1998 the Tomahawk Baseline Improvement Program (TBIP) transitioned to the Tactical Tomahawk program. This program is outlined in the Class Justification and approval (CJ&A No AIR-22448) signed by the Under Secretary of the Navy on 29 May 1998. The acquisition strategy, in brief, is to transition the on-going Tomahawk Baseline Improvement Program (TBIP) to Tactical Tomahawk (TT). The Tactical Tomahawk development program is a cost sharing contract between the Government and the Contractor to add capability to the missile. As part of the development, the contractor provided an unsolicited proposal with a fixed unit price of \$569 thousand (FY99) dollars. This price is predicated on the government pursuing and obtaining a five-year, multi-year procurement.

(U) E. PROGRAM MILESTONES:

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**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
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PROJECT TITLE: TOMAHAWK

FY 99

FY 00

FY 01

To Complete

(U) Program Milestones

2Q/02-OA Complete
4Q/03-IOC
4Q/03-MS III

(U) Engineering Milestones

2Q/99-PDR Complete

3Q/00-CDR Complete

(U) T&E Milestone

4Q/01-AUR System
Qual Complete

1Q/03-TECHEVAL Complete
4Q/03-OPEVAL Complete

(U) Contract Milestones

2Q/02-LRIP One Award
2Q/03-LRIP Two Award

Definitions:

AUR - All-Up-Round

CDR - Critical Design Review

IOC - Initial Operational Capability

LRIP - Low Rate Initial Production

OA - Operational Assessment

PDR - Preliminary Design Review

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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A0545

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION

PROJECT TITLE: TOMAHAWK

PLANNING CENTER

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY2001 Cost</u>	<u>FY2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Primary Hardware Development												
All Product Development Costs, 1974- through TBIP Costs in FY 98			\$2,176,447									
Primary Hardware Development, Tactical Tomahawk Program												
	AUR	CPFF Raytheon,Tucson,AZ	\$31,510	\$68,340	11/98	\$53,400	11/99	\$20,350	11/00	Continuing	Continuing	Continuing
Launcher Integration	TBD	NAVSEA, Wash., DC	\$0	\$15,000	11/98	\$5,100	11/99	\$6,000	11/00	Continuing	Continuing	Continuing
Systems Engineering	FP	Raytheon, Tucson, AZ	\$2,000	\$2,000	10/98	\$2,000	10/99	\$2,000	10/00	Continuing	Continuing	Continuing
	UARC	APL, Laurel, MD	\$3,700	\$3,500	1/99	\$4,400	1/00	\$3,500	1/01	Continuing	Continuing	Continuing
	FP	Boeing, St Louis, MO	\$3,000	\$0		\$0		\$2,000	12/00	Continuing	Continuing	Continuing
Subtotal Project Development			\$2,216,657	\$88,840		\$64,900		\$33,850				

Remarks: None.

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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

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PROGRAM ELEMENT: 0204229N
PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
PLANNING CENTER

PROJECT NUMBER: A0545
PROJECT TITLE: TOMAHAWK

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY 2001 Cost</u>	<u>FY 2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Development Support	Economy Act	NSWC,Dahlgren,VA	\$5,021	\$1,185	11/98	\$1,050	11/99	\$1,123	11/00	Continuing	Continuing	
	Economy Act	NAWC-WD,China Lk,CA	\$2,999	\$2,897	11/98	\$1,178	11/99	\$1,588	11/00	Continuing	Continuing	
	Economy Act	NSWC,Pt Hueneme, CA	\$0	\$220	11/98	\$242	11/99	\$225	11/00	Continuing	Continuing	
	Economy Act	NAWC-AD, Pax River, MD	\$0	\$1,245	11/98	\$1,180	11/99	\$449	11/00	Continuing	Continuing	
	Economy Act	NWAD, Corona,CA	\$0	\$219	11/98	\$433	11/99	\$249	11/00	Continuing	Continuing	
	Economy Act	NUWC, Newport, RI	\$0	\$982	11/98	\$860	11/99	\$449	11/00	Continuing	Continuing	
	SS/CPFF	SAIC, Arlington, VA	\$287	\$1,462	12/98	\$1,416	12/99	\$1,235	12/00	Continuing	Continuing	Continuing
	Economy Act	NOS, Indian Head, MD	\$0	\$637	11/98	\$1,307	11/99	\$899	11/00	Continuing	Continuing	
	Economy Act	NAVSEA (PMS-400), VA	\$200	\$0	11/98	\$0		\$0				
	Economy Act	SPAWAR (PMW-171), CA	\$725	\$406	11/98	\$148	11/99	\$112	11/00	Continuing	Continuing	
	CPFF	Boeing, St Louis, MO	\$900	\$0		\$0		\$0				\$900
	CPFF	LMVF, Valley Forge, PA	\$1,100	\$0		\$0		\$0				\$1,100
	Economy Act	NAVSEA (PMS-425), VA	\$200	\$0		\$0		\$0				
	Economy Act	NAVSEA (PMS-410), VA	\$1,300	\$0		\$0		\$0				
	CPFF	Raytheon TI,San Jose,CA	\$2,617	\$0		\$0		\$0				\$2,617
	UARC	APL, MD	\$870	\$4,930	1/99	\$1,245	1/00	\$449	1/01	Continuing	Continuing	
	Economy Act	NSWC, Dahlgren, VA	\$4,443	\$8,709	11/98	\$5,491	11/99	\$2,880	11/00	Continuing	Continuing	
	Economy Act	NSWC, Pt Hueneme, CA	\$150	\$661	11/98	\$1,770	11/99	\$337	11/00	Continuing	Continuing	
	Economy Act	NUWC, Newport, RI	\$4,749	\$3,654	11/98	\$961	11/99	\$900	11/00	Continuing	Continuing	
Software Development												
Mission Planning Systems (TC2S)	SS/CPFF	Raytheon, Arlington, VA	\$5,100	\$0		\$0		\$15,678	12/00	Continuing	Continuing	Continuing
Weapons Control Systems	CPFF	Lockheed, Philadelphia, PA	\$300	\$26,600	5/99	\$26,000	1/00	\$12,000	1/01	Continuing	Continuing	Continuing
TTWCS	CPFF	LMVF, Valley Forge, PA	\$5,636	\$159		\$0		\$0		Continuing	Continuing	Continuing
Subtotal Support			\$36,597	\$53,966		\$43,281		\$38,573				

Remarks: Software development includes costs of the entire Tomahawk development program including the missile, weapons control systems, and command and control systems.

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Exhibit R-3 , RDT&E Cost Analysis
(Exhibit R-3, Page 8 of 14)

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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A0545

**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION
 PLANNING CENTER**

PROJECT TITLE: TOMAHAWK

Cost Categories:	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY 2001 Cost</u>	<u>FY 2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Developmental, Test & Evaluation	SS/CPFF	Raytheon,Tucson,AZ	\$0	\$0		\$19,574	10/99	\$4,384	10/00	Continuing	Continuing	Continuing
	Economy Act	COMOPTEVFOR,VA	\$400	\$768	11/98	\$435	11/99	\$409	11/00	Continuing	Continuing	
	Economy Act	NAWC,Pt Mugu Tst Spt (CT),CA	\$660	\$1,243	11/98	\$4,808	11/99	\$4,653	11/00	Continuing	Continuing	
	Economy Act	NAWC,China Lk Flt Tst Spt (CT), CA	\$1,320	\$2,497	11/98	\$6,524	11/99	\$7,696	11/00	Continuing	Continuing	
Subtotal Test & Evaluation			\$2,380	\$4,508		\$31,341		\$17,142				
Remarks: All testing through FY 2001 are Development Testing leading to an Operational Assessment (OA). See schedule.												
Contractor Engineering Support												
Subtotal Management			\$0	\$0		\$0		\$0				
Remarks: None.												
Total Cost			\$2,255,634	\$147,314		\$139,522		\$89,565		Continuing	Continuing	

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EXHIBIT R-2a, FY 2001 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A1784

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER
PROJECT TITLE: THEATER MISSION PLANNING CENTER

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
A1784 Theater Mission Planning Center	\$2,479	\$1,895	\$1,871	\$22	\$28	\$28	\$28	\$0	\$96,745
TOTAL	\$2,479	\$1,895	\$1,871	\$22	\$28	\$28	\$28	\$0	\$96,745

Quantity of RDT&E Articles Not Applicable

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The TOMAHAWK Theater Mission Planning Center (TMPC) ashore and Afloat Planning System (APS) provide data base generation and processing, flight mission data, command and control information preparation, and distribution for nuclear (TMPC only) and conventional TOMAHAWK Land Attack Missiles. The TMPC project designs and develops software to decrease mission planning time in response to contingency requirements, improves the production of missile data for distribution and provides automated command and control information for employment and strike planning. APS utilizes the TMPC software on down-sized and ruggedized computer hardware for use in support of Afloat Strike Warfare Commanders. This improves battle-group tactical flexibility and responsiveness while maximizing TOMAHAWK Weapon Systems (TWS) warfare capability. The TMPC and APS systems will be compatible with the Navy Command and Control Systems and the TOMAHAWK Weapon System. TOMAHAWK Strike Planning Tools are comprised of two elements. The Mission Distribution System (MDS) allows TOMAHAWK users the capability to transmit and receive mission data updates in a tactical environment. The Electronic TOMAHAWK Employment Planning Package (ETEPP) provides the TOMAHAWK user with command and control information needed to employ TOMAHAWK missions.

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PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A1784

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER

PROJECT TITLE: THEATER MISSION PLANNING CENTER

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1999 ACCOMPLISHMENTS:

- (U) [\$1,453] Continued TMPC integration of New National Sensors and Software Architectural Enhancements.
- (U) [\$1,026] Supported development of enhancements to the MDS and ETEPP portion of the Tomahawk Strike Planning Tools.

2. FY 2000 PLAN:

- (U) [\$1,895] Continue TMPC integration of New National Sensors and Software Architectural Enhancements.

3. FY 2000 PLAN:

- (U) [\$1,871] Continue TMPC integration of New National Sensors and Software Architectural Enhancements.

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PROJECT NUMBER: A1784

**PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER
PROJECT TITLE: THEATER MISSION PLANNING CENTER**

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY2001</u>
(U) FY 2000 President's Budget:	\$2,562	\$1,906	\$1,891
(U) Appropriated Value:	\$2,568	1,906	
(U) Adjustments from Pres Budget:	-\$83	-\$11	-\$20
(U) FY 2001 President's Budget Submit:	\$2,479	\$1,895	\$1,871

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 1999 net decrease of \$83 thousand reflects a \$71 thousand decrease for Small Business Innovative Research assessment and a \$12 thousand decrease for Inflation savings. FY 2000 reflects a \$11 thousand decrease for an Across-the-Board Congressional rescission. The FY 2001 net decrease of \$20 thousand reflects a \$15 thousand decrease for economic assumptions and a \$5 thousand decrease for reprioritization of requirements within the Navy.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY (Dollars in Thousands)

<u>Appn</u>	<u>FY 1998</u> <u>Budget</u>	<u>FY 1999</u> <u>Estimate</u>	<u>FY 2000</u> <u>Estimate</u>	<u>FY 2001</u> <u>Estimate</u>	<u>FY 2002</u> <u>Estimate</u>	<u>FY 2003</u> <u>Estimate</u>	<u>FY 2004</u> <u>Estimate</u>	<u>FY 2005</u> <u>Estimate</u>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
WPN	\$2,719	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	Continuing	Continuing
OPN	\$27,141	\$56,905	\$37,742	\$25,953	\$26,807	\$27,880	\$28,474	\$28,946	Continuing	Continuing

Related RDT&E

Not applicable.

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EXHIBIT R-2a, FY 2001 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A1784

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER

PROJECT TITLE: THEATER MISSION PLANNING CENTER

(U) D. ACQUISITION STRATEGY:

The acquisition strategy for this project is to maintain contractual continuity to develop system updates to continue TMPC integration of New National Sensors and Software Architectural Enhancements.

(U) E. Program Milestones

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>TO COMPLETE</u>
Program Milestones	3Q-4Q/99 Release to Fleet TMPC 4.0	Annual Fleet Release	Annual Fleet Release	
Engineering Milestones				
T&E Milestones				
Contract Milestones	TMPC APS	TMPC APS	TMPC APS	

R-1 Item No. 163
UNCLASSIFIED

UNCLASSIFIED
EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

DATE: February 2000

BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0204229N

PROJECT NUMBER: A1784

PROGRAM ELEMENT TITLE: TOMAHAWK AND THEATER MISSION PLANNING CENTER
PROJECT TITLE: THEATER MISSION PLANNING CENTER

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY 2001 Cost</u>	<u>FY 2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Primary Hardware Development	Comp/FP	Boeing, St Louis, MO	\$36,841									\$36,841
	SS/CPFF	GD/E, San Diego, CA	\$11,342									\$11,342
	Economy Act	NCCOSC, San Diego, CA	\$4,325									
		Misc. Items 1974-1997	\$34,940									
	CPFF	Lockheed, Bethesda, MD	\$100	\$700	11/98	\$527	11/99	\$527	11/00	Continuing	Continuing	Continuing
	CPFF	MTL, Classified	\$360	\$400	11/98	\$300	11/99	\$300	11/00	Continuing	Continuing	Continuing
	Economy Act	NSWC, Dahlgren, VA	\$1,253	\$0		\$0		\$0		Continuing	Continuing	
Subtotal Project Development			\$89,161	\$1,100		\$827		\$827				
Remarks: None.												
Development Support	CPFF	SAIC, Arlington, VA	\$646	\$679	11/98	\$541	11/99	\$517	11/00	Continuing	Continuing	Continuing
	UARC	APL, Laurel, MD	\$544	\$700	1/99	\$527	1/00	\$527	1/01	Continuing	Continuing	Continuing
Subtotal Support			\$1,190	\$1,379		\$1,068		\$1,044				
Remarks: None.												
Subtotal Test & Evaluation			\$0	\$0		\$0		\$0		\$0		\$0
Remarks: None.												
Subtotal Management			\$0	\$0		\$0		\$0		\$0		\$0
Remarks: None.												
Total Cost			\$90,351	\$2,479		\$1,895		\$1,871		Continuing		Continuing

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